

Alyce Spotted Bear and Walter Soboleff Commission on Native Children



Injury Prevention

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1/27/23

Overview

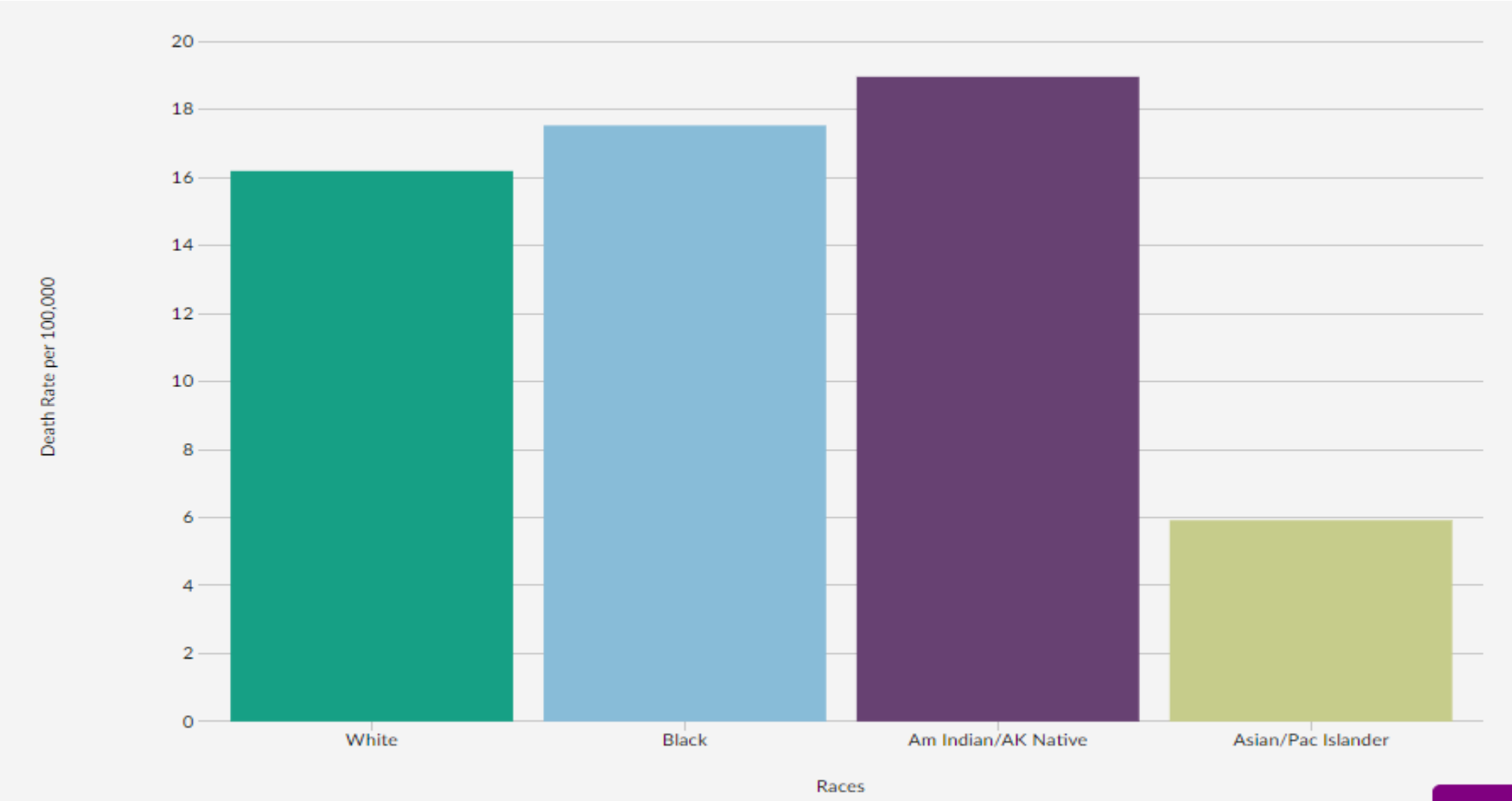
Leading causes of childhood death, hospitalization, and regional reports

Programs and Interventions

Recommendations



2016- 2020 Leading Causes of Unintentional Injury Death by Race, Both Sexes, Ages 0-24 (Hispanic origin=all)





Leading Causes of Death 2016-2020, AI/AN, Both Sexes, Ages 0-24 (Hispanic origin=all)

CDC WISQARS

Unintentional Injury: motor-vehicle, drowning, fall, poisoning, fire/burn, suffocation, etc.

Homicide: drowning, cut-pierce, firearm, suffocation, unspecified, etc.

Suicide: hanging, strangulation, suffocation, firearm, poisoning, etc.

Leading Causes of Death 2016-2020, AI/AN, Both Sexes, All Ages (Hispanic origin=all)

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 315	Unintentional Injury 144	Unintentional Injury 95	Suicide 94	Unintentional Injury 1,391	Unintentional Injury 2,551	Unintentional Injury 2,313	Unintentional Injury 2,104	Malignant Neoplasms 4,407	Heart Disease 12,125	Heart Disease 18,851
2	Short Gestation 187	Homicide 44	Malignant Neoplasms 22	Unintentional Injury 93	Suicide 878	Suicide 1,016	Liver Disease 1,167	Heart Disease 1,812	Heart Disease 3,685	Malignant Neoplasms 10,711	Malignant Neoplasms 17,552
3	SIDS 163	Congenital Anomalies 42	Homicide 19	Malignant Neoplasms 28	Homicide 339	Liver Disease 679	Heart Disease 827	Liver Disease 1,666	Unintentional Injury 1,693	Chronic Low. Respiratory Disease 3,452	Unintentional Injury 12,288
4	Unintentional Injury 154	Influenza & Pneumonia 23	Congenital Anomalies 16	Congenital Anomalies 14	Malignant Neoplasms 69	Homicide 530	Suicide 558	Malignant Neoplasms 1,618	Liver Disease 1,606	Diabetes Mellitus 3,329	Liver Disease 6,196
5	Placenta Cord Membranes 64	Malignant Neoplasms 18	Chronic Low. Respiratory Disease 6	Homicide 14	Heart Disease 43	Heart Disease 319	Malignant Neoplasms 501	Diabetes Mellitus 829	Diabetes Mellitus 1,353	Cerebro-vascular 2,857	Diabetes Mellitus 6,013
6	Maternal Pregnancy Comp. 63	Heart Disease 9	Heart Disease 5	Influenza & Pneumonia 10	Congenital Anomalies 25	Malignant Neoplasms 170	Diabetes Mellitus 368	COVID-19 501	COVID-19 959	COVID-19 2,841	COVID-19 4,693
7	Circulatory System Disease 26	Cerebro-vascular 8	Influenza & Pneumonia 5	Heart Disease 9	Diabetes Mellitus 25	COVID-19 136	Homicide 363	Suicide 376	Chronic Low. Respiratory Disease 850	Alzheimer's Disease 2,000	Chronic Low. Respiratory Disease 4,618
8	Bacterial Sepsis 21	Septicemia 4	Perinatal Period 3	Cerebro-vascular 6	Complicated Pregnancy 20	Diabetes Mellitus 108	COVID-19 237	Cerebro-vascular 307	Cerebro-vascular 570	Unintentional Injury 1,749	Cerebro-vascular 3,922
9	Homicide 21	Perinatal Period 3	Five Tied 2	Chronic Low. Respiratory Disease 4	COVID-19 18	Influenza & Pneumonia 60	Influenza & Pneumonia 115	Homicide 220	Influenza & Pneumonia 353	Influenza & Pneumonia 1,338	Suicide 3,310
10	Necrotizing Enterocolitis 21	Meningo-coccal Infection 2	Five Tied 2	Four Tied 2	Liver Disease 17	Septicemia 54	Cerebro-vascular 102	Chronic Low. Respiratory Disease 217	Nephritis 337	Nephritis 1,277	Influenza & Pneumonia 2,134

2016 – 2020, United States

Unintentional Injuries

Age <1 Year, Am Indian/AK Native, Both Sexes

Total Deaths: 154

<1
Congenital Anomalies 315
Short Gestation 187
SIDS 163
Unintentional Injury 154

Cause of Death

Number of Deaths

Suffocation

83.8%

129

MV Traffic

7.8%

12

Drowning

4.5%

7

Machinery

1.3%

2

Fall

0.6%

1

Fire/burn

0.6%

1

Natural/ Environment

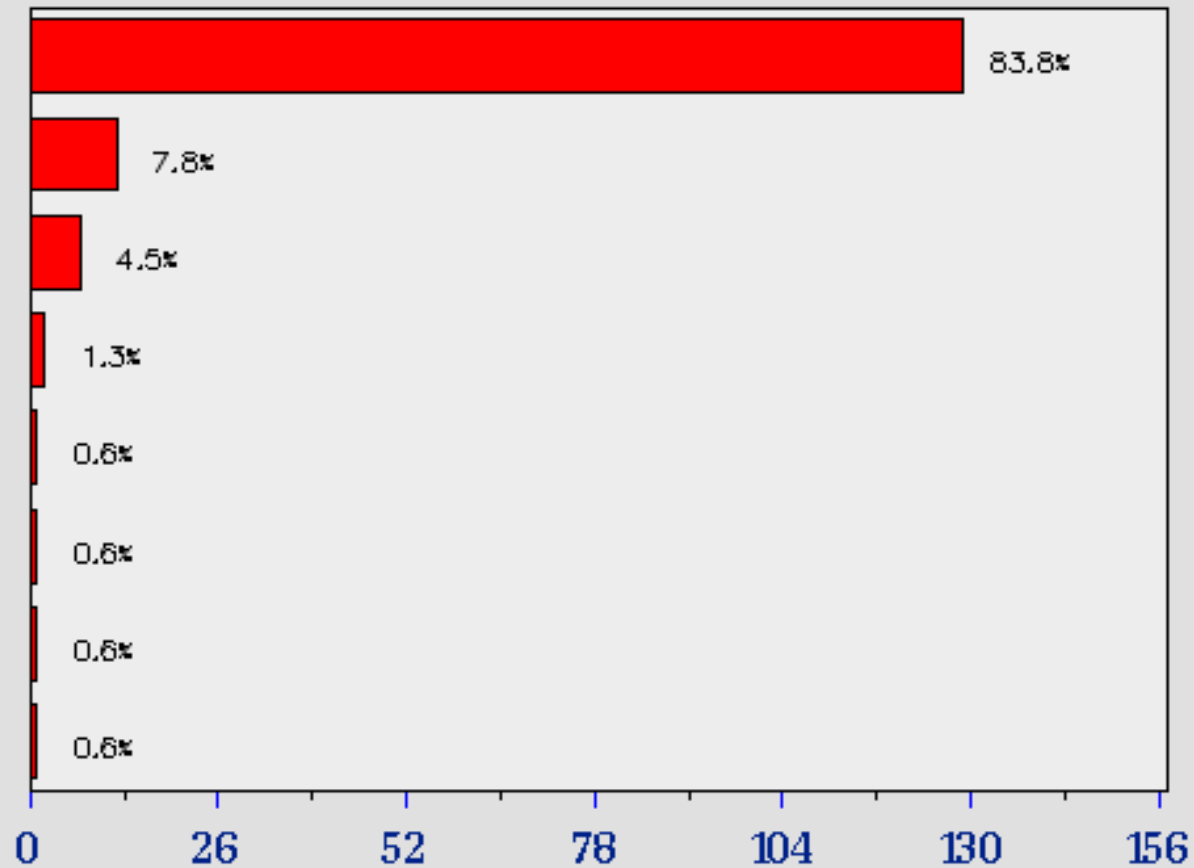
0.6%

1

Poisoning

0.6%

1



Number of Deaths

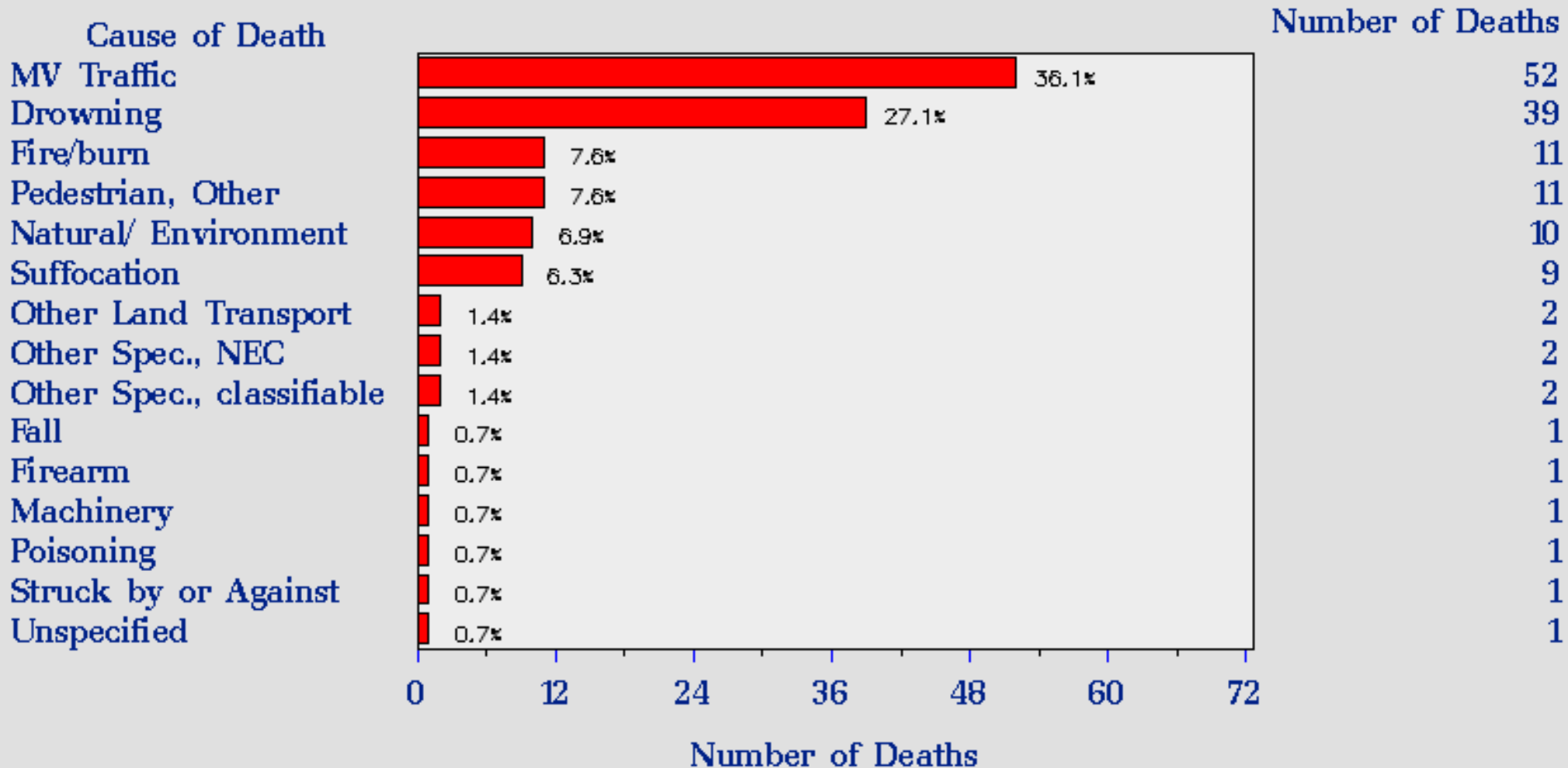
2016 – 2020, United States

Unintentional Injuries

Ages 1–4, Am Indian/AK Native, Both Sexes

Total Deaths: 144

1-4
Unintentional Injury 144
Homicide 44
Congenital Anomalies 42
Influenza & Pneumonia 23



2016 – 2020, United States

Unintentional Injuries

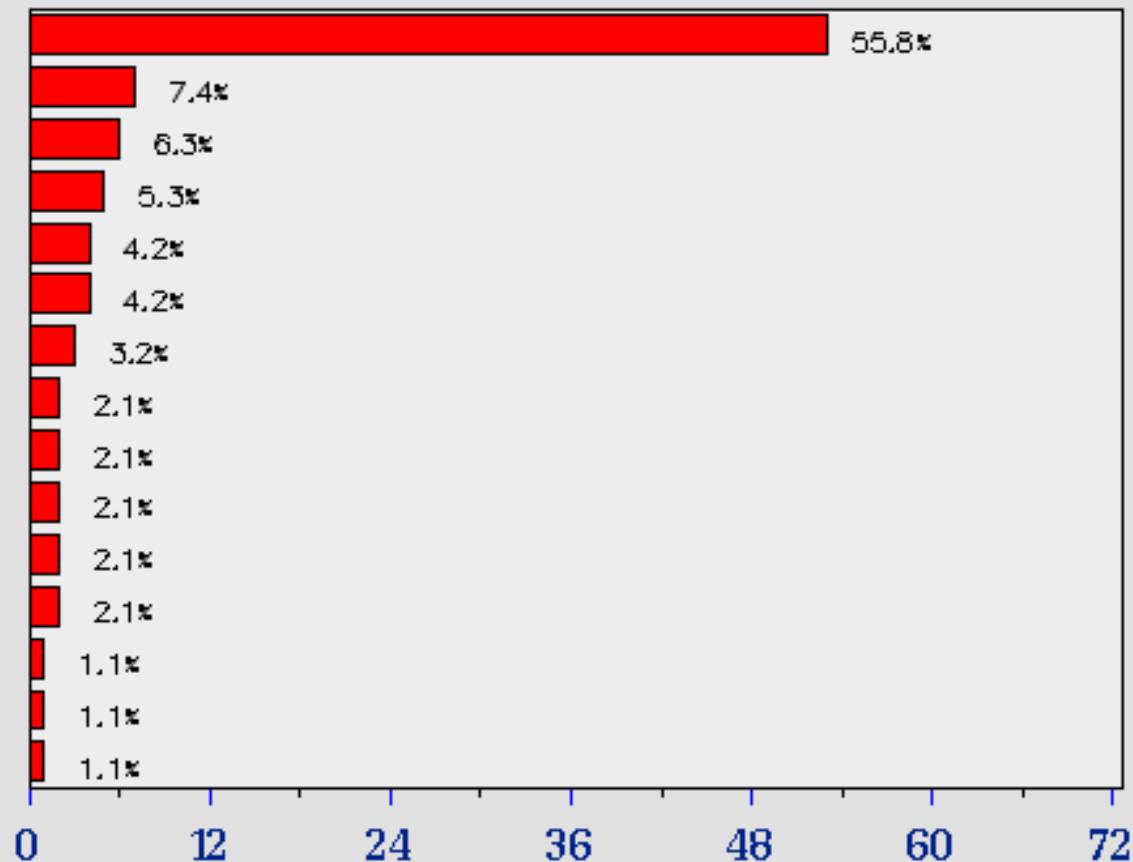
Ages 5–9, Am Indian/AK Native, Both Sexes

Total Deaths: 95

5-9
Unintentional Injury 95
Malignant Neoplasms 22
Homicide 19
Congenital Anomalies 16

Cause of Death

MV Traffic
Drowning
Fire/burn
Pedestrian, Other
Other Land Transport
Suffocation
Other Transport
Fall
Firearm
Poisoning
Struck by or Against
Unspecified
Machinery
Natural/ Environment
Other Spec., classifiable



Number of Deaths

Number of Deaths

2016 – 2020, United States

Unintentional Injuries

Ages 10–14, Am Indian/AK Native, Both Sexes

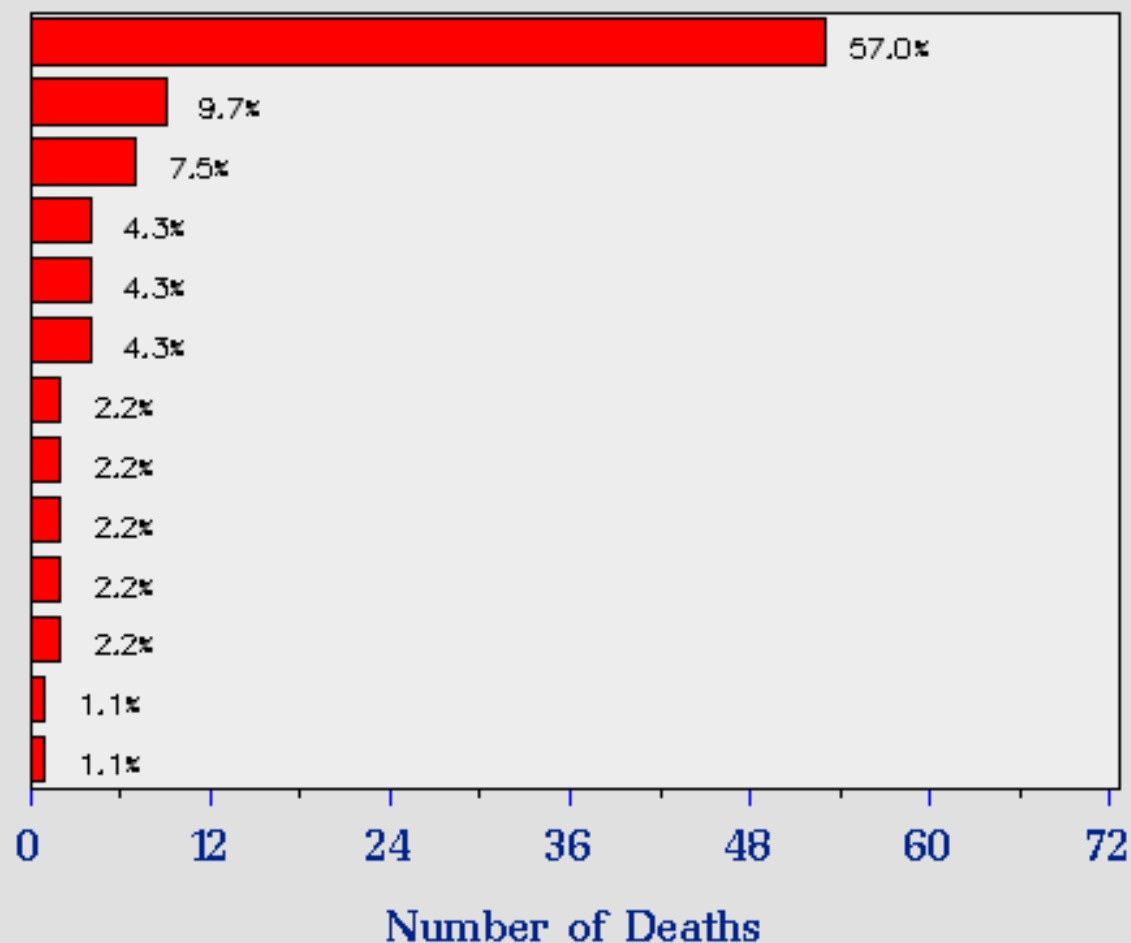
Total Deaths: 93

10-14
Suicide 94
Unintentional Injury 93
Malignant Neoplasms 28
Congenital Anomalies 14
Homicide 14

Cause of Death

MV Traffic
Other Land Transport
Drowning
Firearm
Natural/ Environment
Poisoning
Fall
Pedal cyclist, Other
Pedestrian, Other
Suffocation
Unspecified
Other Spec., classifiable
Struck by or Against

Number of Deaths

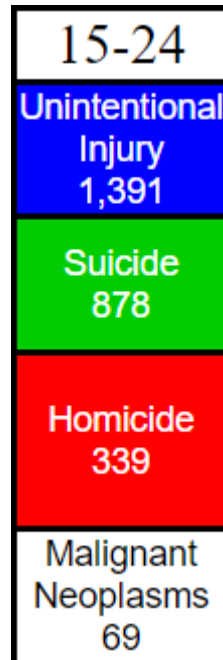


2016 – 2020, United States

Unintentional Injuries

Ages 15–24, Am Indian/AK Native, Both Sexes

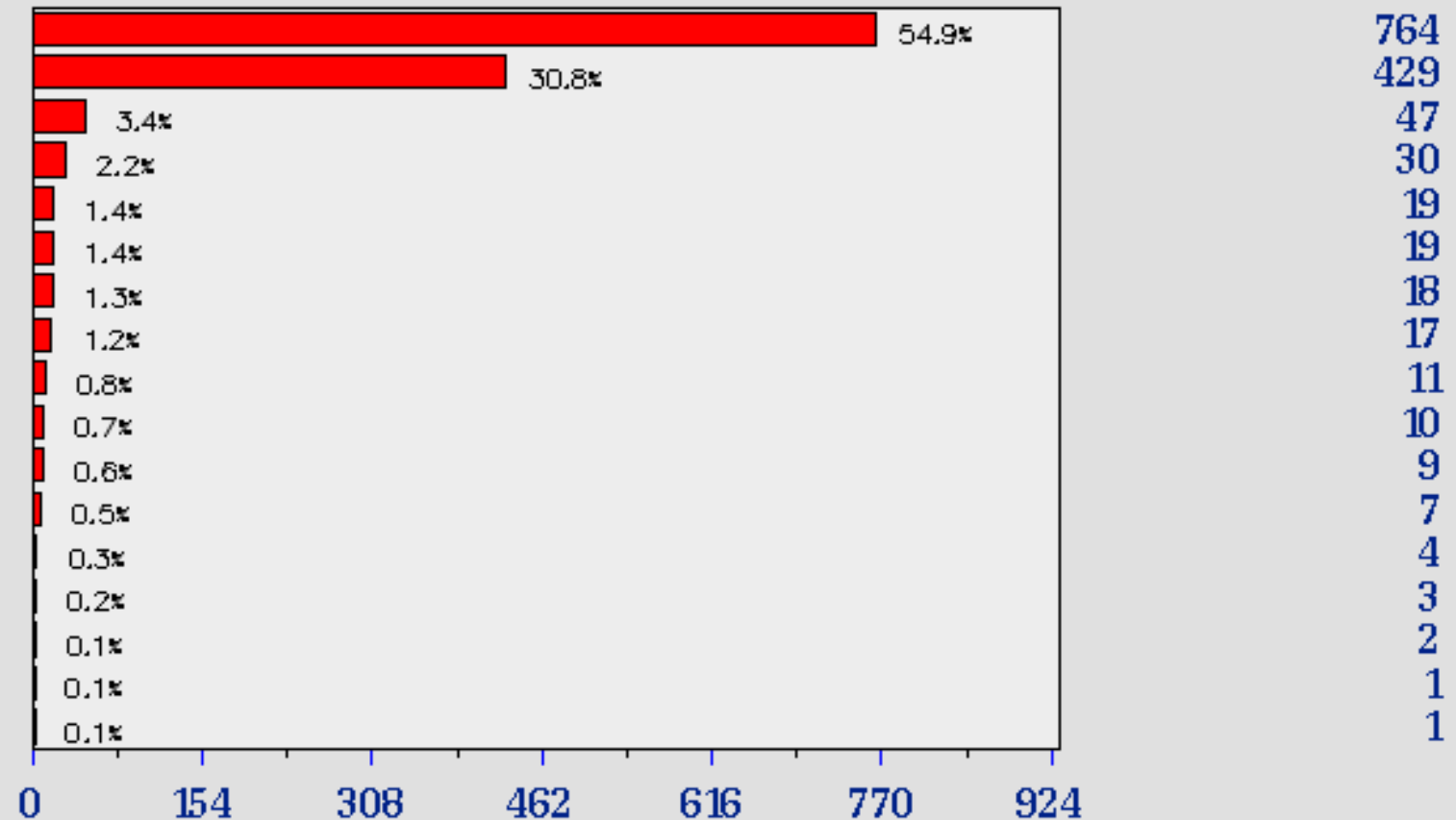
Total Deaths: 1,391

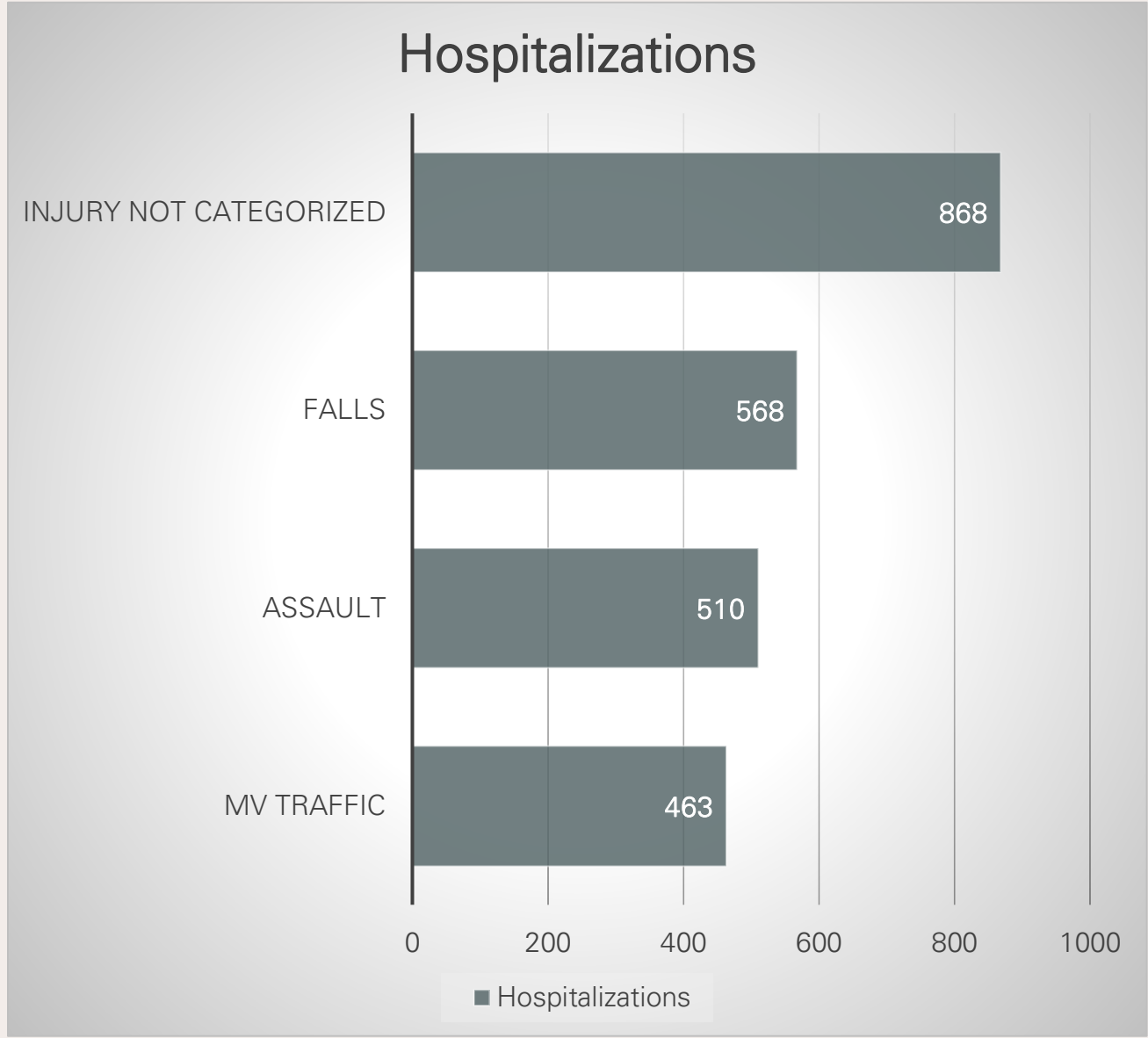


Cause of Death

MV Traffic
Poisoning
Drowning
Natural/ Environment
Firearm
Other Land Transport
Pedestrian, Other
Fall
Suffocation
Fire/burn
Other Spec., classifiable
Struck by or Against
Other Spec., NEC
Other Transport
Cut/pierce
Machinery
Pedal cyclist, Other

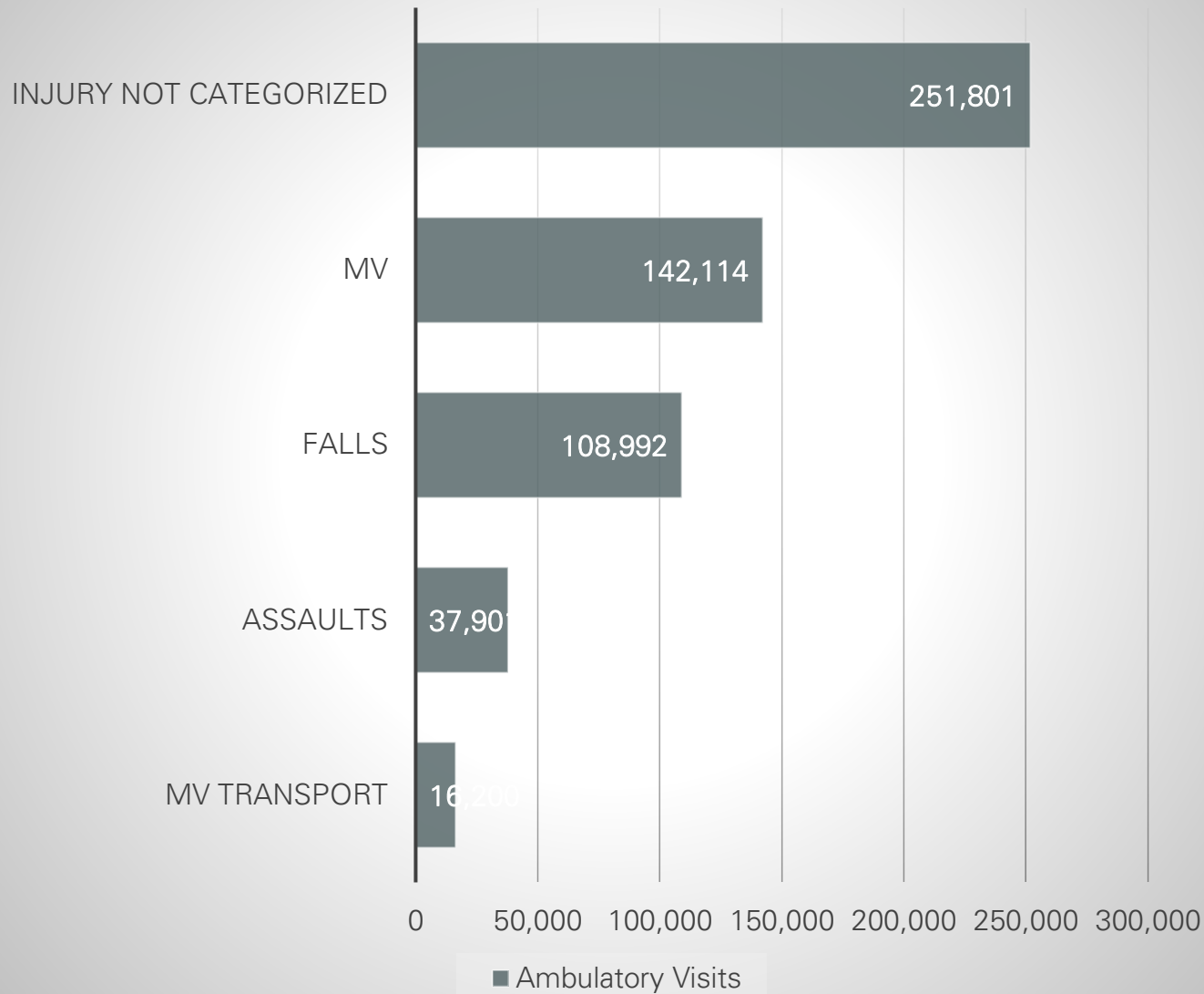
Number of Deaths





2017-2021
IHS Top Injury
Hospitalizations, Ages 0-25,
Both Sexes

Ambulatory Visits



2017-2021
IHS Top Ambulatory Injury
Visits, Ages 0-25, Both
Sexes

Ambulatory= Combined Emergency
Department Visits and Outpatient Visits

Regional Trauma Report- AZ

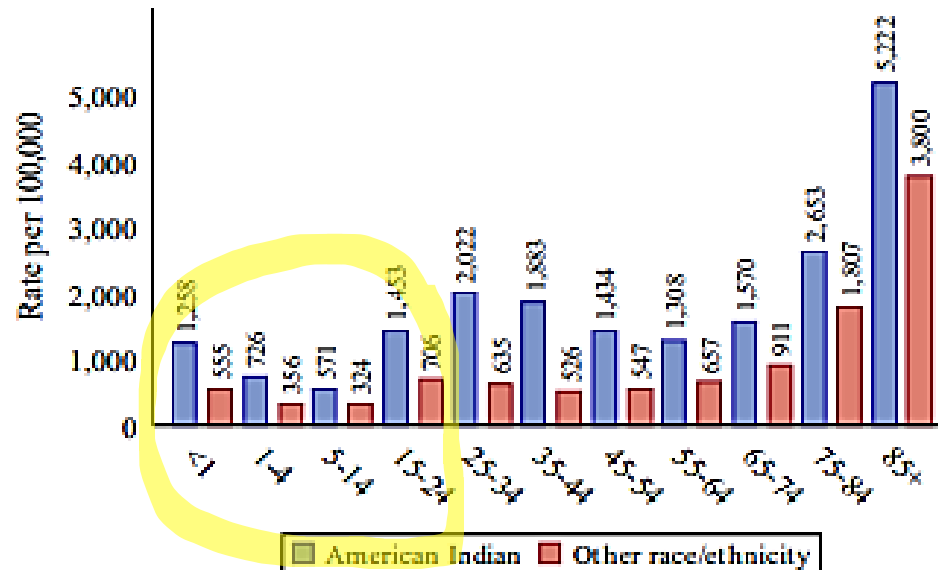


ARIZONA DEPARTMENT
OF HEALTH SERVICES

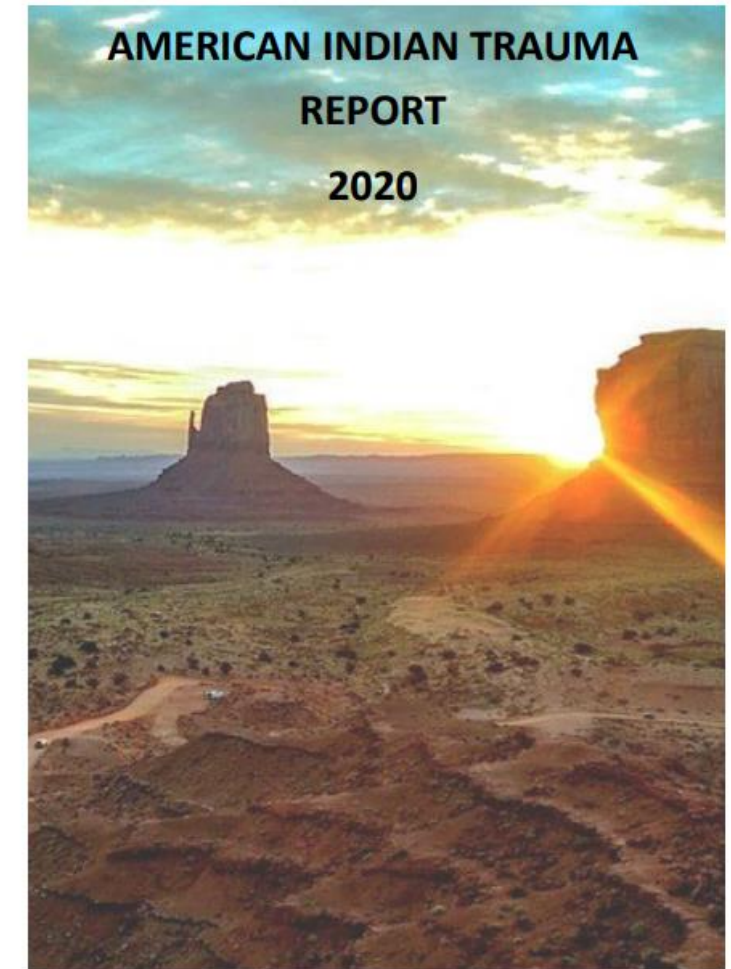
BUREAU OF EMERGENCY
MEDICAL SERVICES AND
TRAUMA SYSTEM

AGE-SPECIFIC TRAUMA RATE

Figure 5: Age-specific trauma rate per 100,000



Data source: Arizona State Trauma Registry 2018



<https://www.azdhs.gov/documents/director/tribal-liaison/american-indian-trauma-report-2020.pdf>

Regional Injury Report - AK

Leading Causes of Hospitalization by Age Group, AN/AI People, 2015-2016

Data Source: Alaska Health Facility Data Reporting System

Note: Blue shaded blocks indicate causes of hospitalizations related to injury

Age					
0-9 Years	Newborn 1,980	Other Respiratory Diseases 385	Influenza and Pneumonia 366	Perinatal Conditions 288	Acute Bronchitis 160
10-19 Years	Behavioral Health 993	Pregnancy/Childbirth 566	Diseases of the Digestive System 85	Unintentional Injuries 77	Diseases of the Skin 39
20-29 Years	Pregnancy/Childbirth 3,231	Behavioral Health 746	Diseases of the Digestive System 127	Unintentional Injuries 98	Diseases of the Skin 84



Alaska Native Injury Atlas

Leading Causes of Injury Hospitalization by Age, AN/AI People, 2007-2016

Data Source: Alaska Trauma Registry

AGE	0 to 9 years	10 to 19 years	20 to 29 years
Total	1,225	2,131	2,857
	Fall 476	Suicide Attempt 630	Assault 644
	Poisoning 102	Fall 313	Suicide Attempt 623
	Fire and Burn 83	Motor Vehicle 247	Fall 377
	Motor Vehicle 74	ATV 199	Motor Vehicle 370
	Foreign Body 65	Assault 139	ATV 199

Injury Hospitalization by Age, AN/AI Females, 2007-2016

Data Source: Alaska Trauma Registry

AGE	0 to 9 years	10 to 19 years	20 to 29 years
Total	505	934	1,002
	Fall 211	Suicide Attempt 419	Suicide Attempt 341
	Poisoning 42	Fall 103	Assault 170
	Foreign Body 36	ATV 98	Fall 158
	Motor Vehicle 30	Motor Vehicle 88	Motor Vehicle 142
	Fire and Burn 29	Poisoning 60	ATV 53

Injury Hospitalization by Age, AN/AI Males, 2007-2016

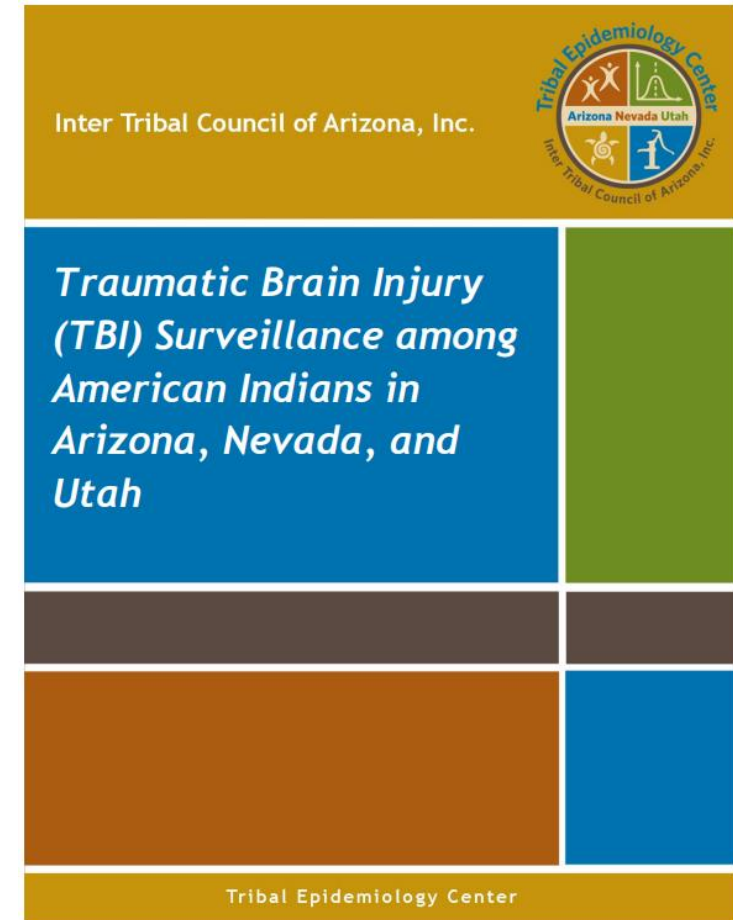
Data Source: Alaska Trauma Registry

AGE	0 to 9 years	10 to 19 years	20 to 29 years
Total	720	1,197	1,853
	Fall 265	Suicide Attempt 211	Assault 474
	Poisoning 60	Fall 210	Suicide Attempt 281
	Fire and Burn 54	Motor Vehicle 159	Motor Vehicle 228
	Motor Vehicle 44	Assault 106	Fall 219
	ATV 35	ATV 101	ATV 146

Topic Focused Reports – Traumatic Brain Injury 2018

- Inter Tribal Council of Arizona, Inc.
- 2012-2016
- Arizona, Nevada, Utah

https://itcaonline.com/wp-content/uploads/2018/10/TBI-Report_FINAL-v2-10.19.18.pdf



Federal Programs for Injury Prevention



BUREAU of INDIAN AFFAIRS
INDIAN HIGHWAY SAFETY PROGRAM



- Indian Health Service, Injury Prevention Program
- <https://www.ihs.gov/injuryprevention/>
- Centers for Disease Control and Prevention, National Center for Injury Prevention
- <https://www.cdc.gov/injury/tribal/index.html>
- National Highway Traffic Safety Administration
- <https://www.nhtsa.gov/>
- Bureau of Indian Affairs, Indian Highway Safety Program
- <https://www.bia.gov/bia/ojs/dhs>
- <https://www.nhtsa.gov/document/bureau-indian-affairs-fy-2022-highway-safety-plan>



Indian Health Service

- Interventions:
 - Fire/burn: smoke alarms
 - Traffic safety: seatbelts, child safety seats
 - Playground safety
 - Drowning
- Tribal Injury Prevention Cooperative Agreement Program (TIPCAP)
 - Since 1997, every 5 years
 - 127 Tribal Programs Funded
 - Focus Areas: Motor vehicle-related injuries, Falls

<https://www.ihs.gov/injuryprevention/>



Tribal Injury Prevention Cooperative Agreement Program (TIPCAP)

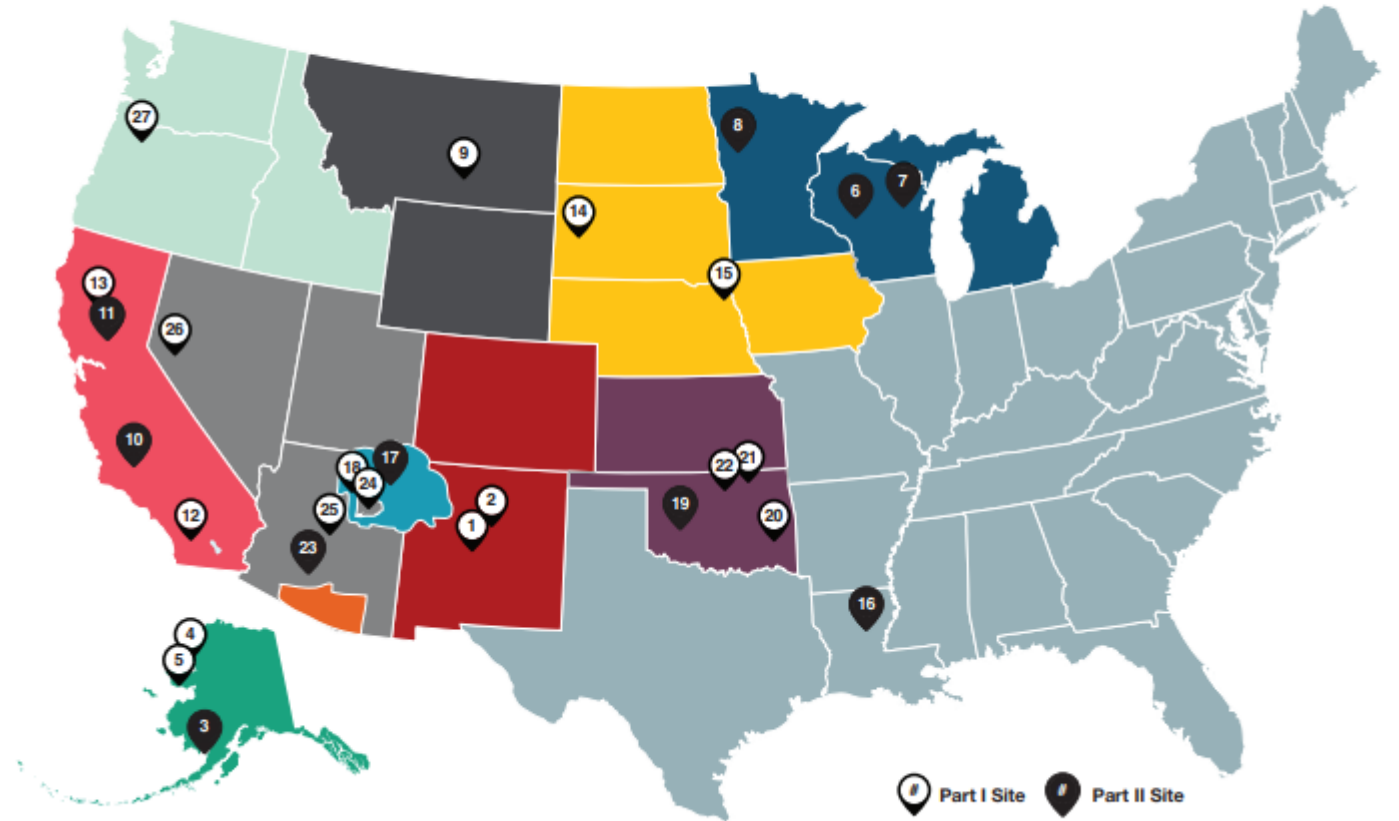
TIPCAP Current Program 2021-2025

27 Tribes and Tribal Organizations funded

16 programs on traffic injuries

17 programs on fall injuries

3 programs on traumatic brain injuries



2021-2025 TIPCAP Grantees by IHS Area



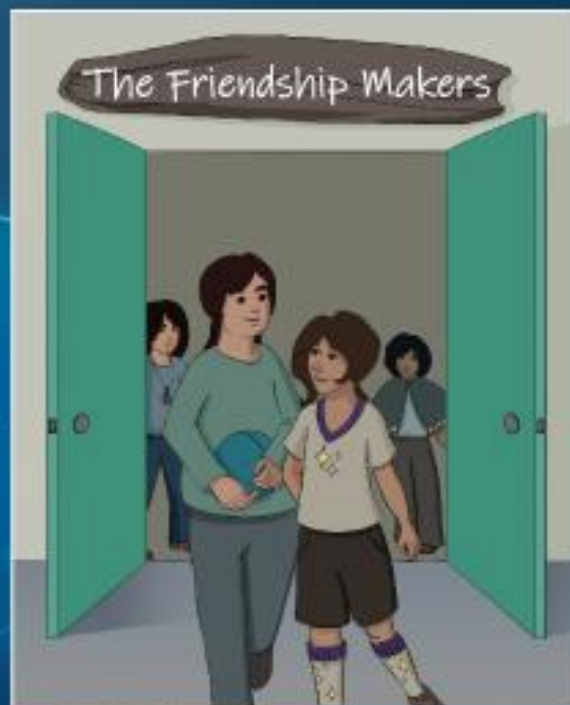
Centers for Disease Control and Prevention

- National Center for Injury Prevention and Control
 - Adverse Childhood Experiences (ACEs)
 - Drug Overdose
 - Suicide Prevention
 - Motor Vehicle Safety
 - Violence Against AI/AN People



CDC Star Collection Books and Videos

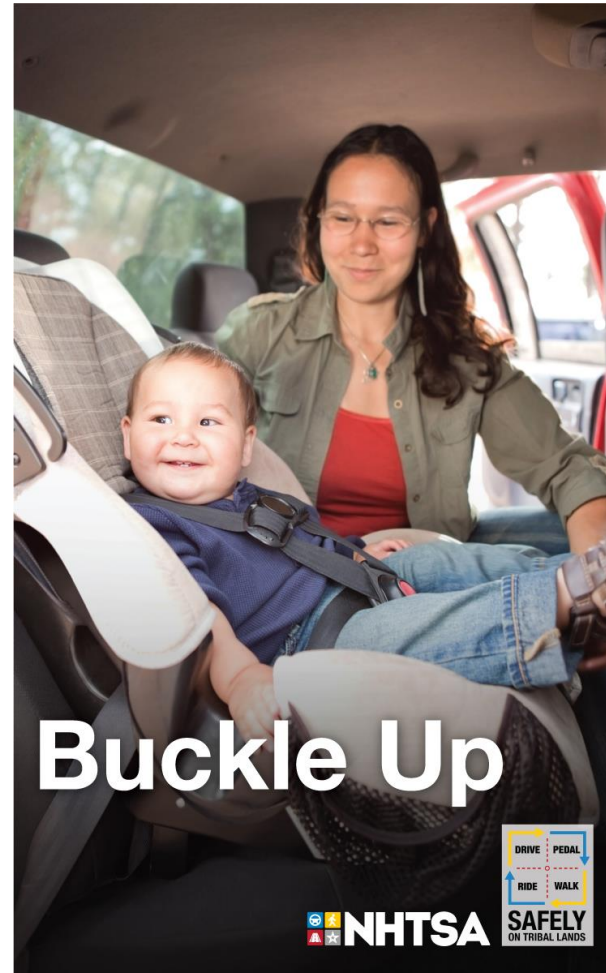
- Kindergarten – third grade
- Strengths-based approach
- Children are connected to communities
- Videos and Coloring Books



INTRODUCING Star Collection



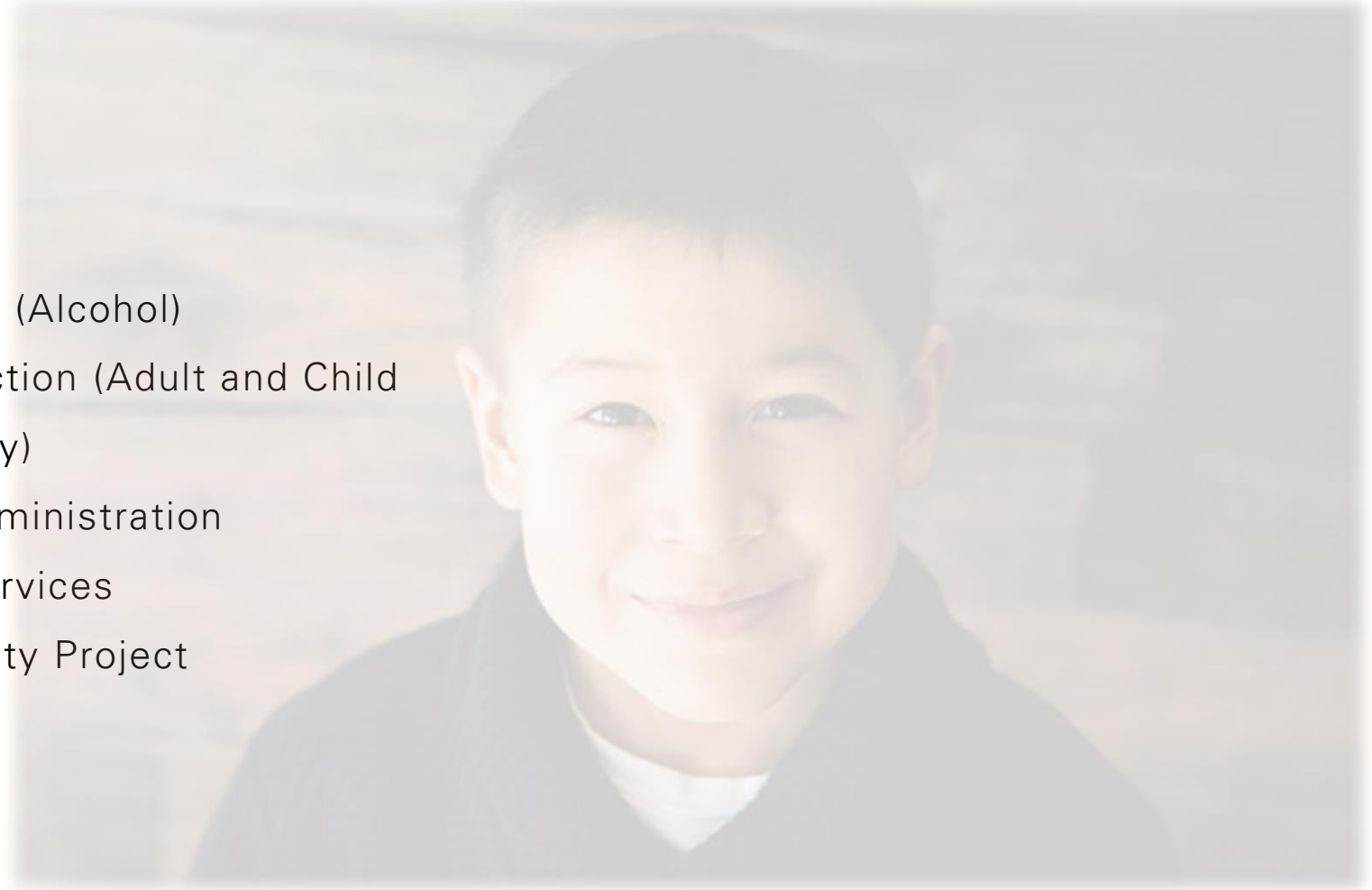
- Tribal Traffic Safety Initiative, Four Corners and Beyond
- Occupant Protection
- Speeding
- Pedestrian Safety
- Impaired Driving





BIA Indian Highway Safety Program

- Impaired Driving (Alcohol)
- Occupant Protection (Adult and Child Passenger Safety)
- Planning and Administration
- Police Traffic Services
- Community Safety Project

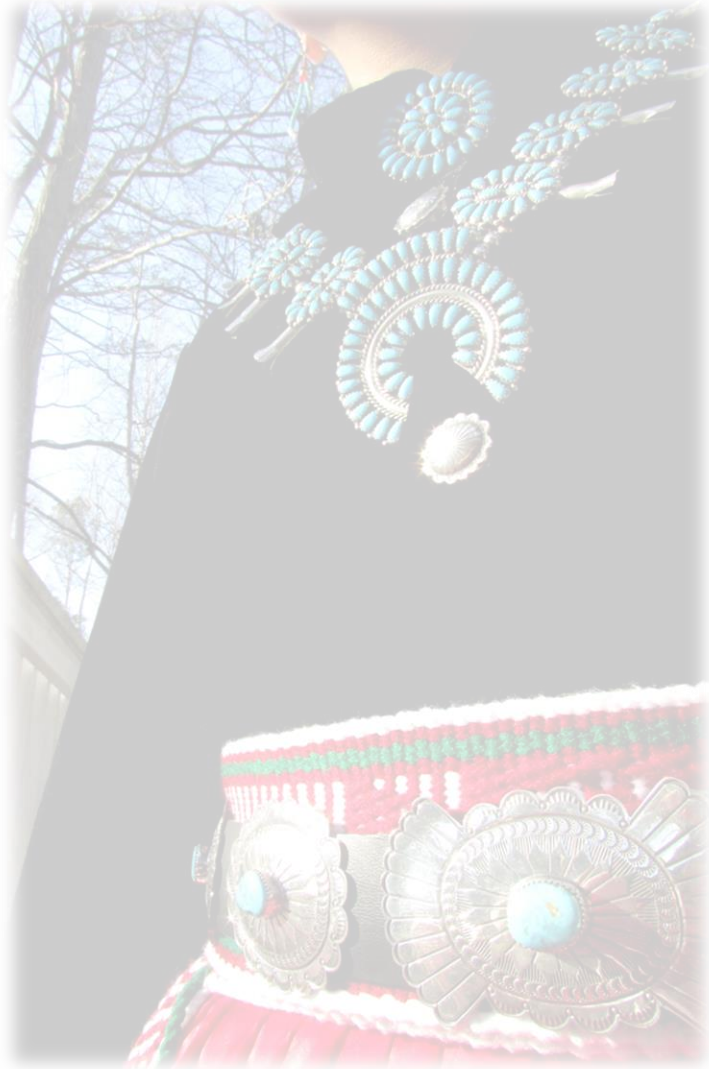


Recommendations - Federal

- Provide funding more commensurate with the problem – Unintentional injuries are the number one killer of Native people ages 1-54
- Review/change federal regulations that impede federal agencies from working together – multi-agency interagency agreements
- Waive matching funds requirement for tribes applying for all federal funding – \$6B bipartisan infrastructure bill - Safe Streets and Roads For All (SS4A)
- Eliminate reimbursement-based funding for tribes
- Seek upstream interventions and allow funding flexibility for local approaches. Primary vs. secondary interventions.

Recommendations - Data

- When data are collected, oversample in Indian Country
- Support/fund the 12 Tribal Epidemiology Centers to collect injury data and create reports – clearinghouse for AI/AN Unintentional Injury Prevention (<https://tribalepicenters.org/>)
- Employ indigenous evaluation guiding principles for programs:
 - culturally responsive and community driven
 - develop partnerships with Elders, knowledge keepers, and healers
 - share personal experiences
 - focus on strength-based rather than deficit-based perspectives
 - use trauma-informed approach
 - allow sufficient time to understand context, build relationships, and foster community engagement



Thank you
Ahe'hee'